

REMARKS

The Examiner's action of March 1, 2005 is noted in which the Specification is objected to as failing to provide proper antecedent basis for the claimed subject matter with respect to Claim 10. Since Claim 10 forms an original part of the Patent Specification, the subject matter of Claim 10, namely 3-micron band operation, is now inserted into the Specification at Page 9, Line 20. Removal of this ground of objection is respectfully solicited.

Moreover, the improper dependent form of Claim 10 has not been corrected.

The Claims are also rejected under 35 USC 112 and language indicating that it is the output of the optical parametric amplifier that is intended is now placed in Claims 8, 9 and 10. Thus Applicants have traversed the 35 USC 112 rejection and removal of this rejection is therefore requested.

Claims 1-18 are rejected under an obviousness-type double-patenting rejection and Applicants provide herewith a suitable Terminal Disclaimer, thus eliminating this ground of rejection.

This leaves rejection of Claims 11-18 under 35 USC 102(b) and Claims 1-10 under 35 USC 103(a). Both rejections are grounded in the Komine reference.

At the outset it will be seen that both sets of claims recite a single beamline orientation.

What will be eminently clear from the Komine reference is that, inter alia, OPO 13 of Komine is not an optical parametric amplifier. This is clearly seen in that the output of OPO 13 consists of waves 2, 3 and 4, none of which are an amplified version of the input waves 1 or 2. Note that the wave 2 output of OPO 13 in no way can be an amplified version of input wave 2. This is presumably why Komine labels box 13 an optical parametric oscillator.


Second, in no way is the Komine system an in-line system. Note in Figures 4, 5 and 6 the output is orthogonal to the input pumping beam. Anything that comes out to the right is the deleted pump as indicated in Figure 4 and is likewise carried through in Figures 5 and 6. Note that whatever is fed into OPO 13 is therefore not in line with the pumping beam as indicated above. Thus whatever comes out of OPO 13 as shown in Figures 8, 9, 10 and 11 of Komine is not the result of an in-line input, but rather a beam that is orthogonal to the pump beam.

In short, Komine does not show the combination of an optical parametric oscillator and an optical parametric amplifier. Second, Komine does not show an in-line system from beginning to end.

It is thus Applicants' contention that the claims are patentably distinct and not obvious over the Komine reference.

Allowance of the claims and issuance of the case are therefore earnestly solicited.

Respectfully submitted,



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